

Facile synthesis of nitrogen-doped hierarchical porous lamellar carbon for high-performance supercapacitors

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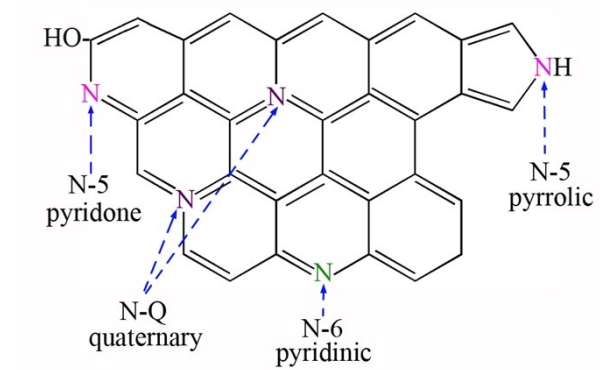


Fig. S1 Schematic model of different nitrogen types in carbon matrix

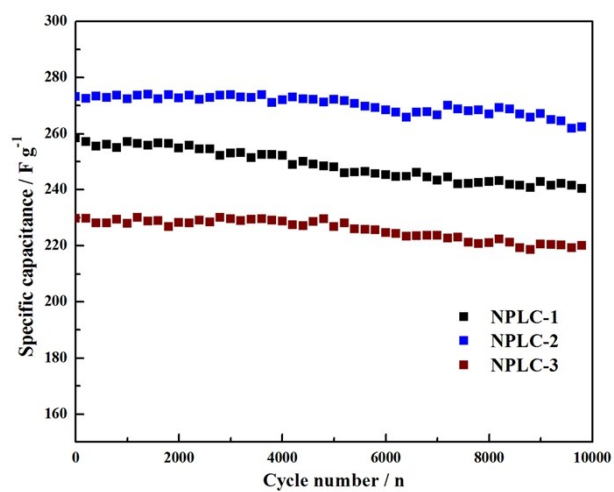


Fig. S2 Cycle life curves of NPLCs tested at a current density of 20 A g^{-1} in a three-electrode system

Table S1 Porosity parameter, Elemental analysis, nitrogen content and capacitance of NPLCs

Samples	D_{ap} (nm)	S_{BET} (m ² g ⁻¹)	V_t (cm ³ g ⁻¹)	Elemental analysis			Nitrogen content			C_{gd} (F g ⁻¹)	C_{cv} (F g ⁻¹)
				(at.%)			(at.%)				
				C	O	N	N-6	N-5	N-Q		
NPLC-1	1.029	853.195	0.886	91.2 4	6.77	1.99	0.332	1.572	0.086	254.731	230.194
NPLC-2	1.089	1222.961	1.540	79.0 1	19.21	1.78	0.312	0.795	0.673	290.676	280.926
NPLC-3	1.126	1329.112	1.711	88.6 3	10.56	0.81	-	-	-	160.693	150.133

D_{ap} - average pore diameter, S_{BET} - BET specific surface area, V_t - total pore volumes.

Table S2 Equivalent circuit model fitting parameters

Samples	<i>ESR</i>	<i>R_{ct}</i>	<i>CPE1-T</i>	<i>CPE1-P</i>	<i>CPE2-T</i>	<i>CPE2-P</i>
NPLC-1	0.781	1.01	1.357	0.259	0.336	0.969
NPLC-2	0.771	0.368	1.128	0.528	0.352	0.983
NPLC-3	0.779	0.462	0.801	0.629	0.218	0.972